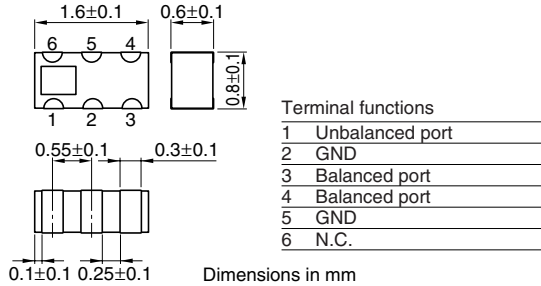


# Multilayer Chip Baluns For WiMAX

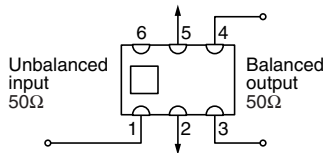
Conformity to RoHS Directive

HHM Series HHM1727D1

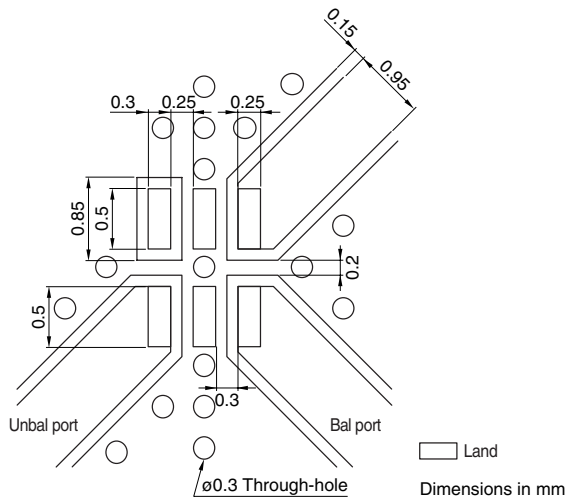
## SHAPES AND DIMENSIONS



## CIRCUIT DIAGRAM



## RECOMMENDED PC BOARD PATTERNS



Line width be designed to match 50Ω characteristic impedance depending on PCB material and thickness.

## ELECTRICAL CHARACTERISTICS

Unbalanced impedance		50Ω
Balanced impedance		50Ω
Frequency range		3300 to 3900MHz
Unbalanced port return loss		10dB min.
Phase imbalance at balanced port		180±15deg
Amplitude imbalance at balanced port		0±1.5dB
Insertion loss		1.2dB
Attenuation	[800 to 960MHz]	11dB min.
	[1700 to 1900MHz]	4dB min.
	[1900 to 1980MHz]	3.5dB min.(4dB typ.)
Power capacity		0.5W max.
Temperature range	Operating	-40 to +85°C
	Storage	-40 to +85°C
Packaging style and quantities		4000pieces/reel

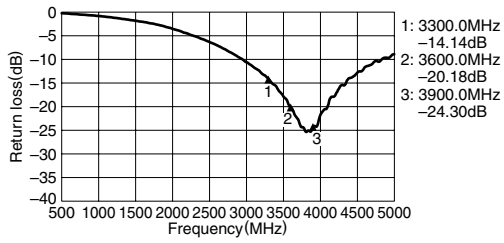
• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

• All specifications are subject to change without notice.

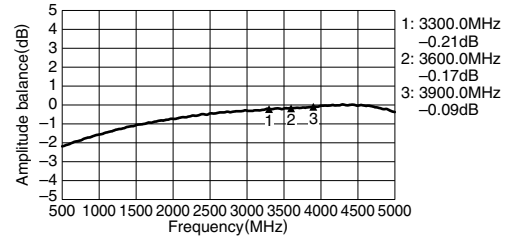
## FREQUENCY CHARACTERISTICS

Unbalance 50Ω/Balance 50Ω

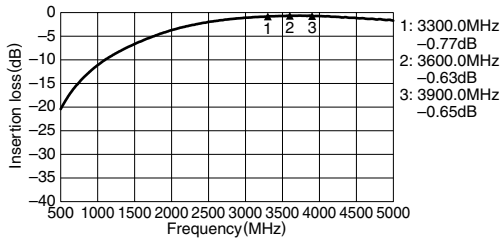
### RETURN LOSS



### AMPLITUDE BALANCE



### INSERTION LOSS



### PHASE BALANCE

